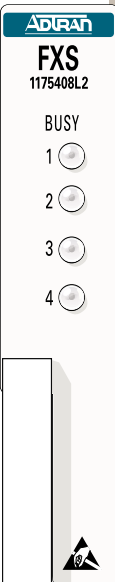


## QUAD FXS

L1 CLEI: SIC2WXOK  
L2 CLEI: SIC2WXHK



## QUAD FXO

L1 CLEI: SIC2VXOK  
L2 CLEI: SIC2VXHK



## TURN UP STEPS

**1** Insert card into slots 1-6 on the TA 750. The unit will automatically map DS0s in the T1 as noted below.

### TIME SLOT ASSIGNMENT

Physical Slot	T1 Time Slot Assigned
1	1-4
2	5-8
3	9-12
4	13-16
5	17-20
6	21-24

**2** Verify LED sequencing. LEDs will stop sequencing once unit is initialized.

*Note: If the unit is inserted into a physical slot which has its timeslots allocated to the FTI (DSX-1) or Nx56/64 port, the LEDs will sequence continually, indicating a problem. The time slots must be freed up using the menu interface before the unit will become operational.*

### STATUS LEDS (GREEN)

- OFF On Hook
- FLASHING Ringing (*FXS only*)
- ON Off Hook (Busy)
- SEQUENCING All Four Time Slots Unavailable

**3** If factory default settings to be used for the application, then installation is complete. If further provisioning is desired proceed to step 4.

### FACTORY DEFAULT SETTINGS

*The FXS unit has factory default provisioning: FXS mode, loop start signaling and automatic loop provisioning. The automatic loop provisioning function will automatically set the line impedance and gain after the first off hook event.*

*The FXO factory default settings are FXO mode and loop start signaling.*

*If different settings are desired, the VT 100 terminal interface is used.*

**4** Connect VT 100 compatible terminal to BCU faceplate ADMIN port

**4a** Connect DB-9 cable

**4b** Run terminal emulation program  
Craft Port Settings are as follows: 9600 Baud, No parity, 8 data bits, 1 Stop bit, No flow control.

**4c** If using Windows Hyperterm open by selecting Programs/Accessories/Hyperterminal

*Note: To ensure proper display background, select VT 100 Terminal Emulation under Settings.*

**5** Proceed through menus to desired access module

**5a** select Access Modules

**5b** select 1-6 (slot)

**5c** select 1-4 (circuit)

*Note: To traverse through the menus, select the desired entry and press Enter. To work backwards in the menu press ESC (escape key). To return to the top of the menu at any time, press the return key twice.*

**6** Change port provisioning for a particular application.

*Note: Provisioning for a port can be copied to another port or to all similar ports.*

**7** Testing - to access the test menu for an access module select *test* (item 4 after 5c)

### TESTING

#### Self Test

■ Performed when the Quad FXS or FXO is inserted into an active chassis to verify proper operation of critical circuits.

#### Initiated Tests

■ Digital Loopback Test – loops back DS0 data coming from the network for each individual channel.

■ Network On-Hook / Off-Hook Test – tests signaling sent to the network by the unit.

■ Customer Ring Test (*FXS only*) – activates the unit's ring relay in a 2-on / 4-off ring cadence, providing ringing to the customer loop.

■ 1000 Hz DRS Tone Generation Test – sends DRS signal on the receive path to the loop and transmit path towards Carrier.

*Note: All tests except self test are initiated through the TA 750 BCU Admin Port, TA 850 RCU, or TA 1500 SCU.*

*Note: The Quad FXS is for use in the TA 750 and the TA 850.*

*The Quad FXO is for use in the TA 750, the TA 850, and the TA 1500.*

*Note: The 1175408L2 is completely interchangeable with the 1175408L1.*

*The 1175407L2 is completely interchangeable with the 1175407L1.*



■ For a complete Quad FXS I&M Practice: 877.457.5007, Document # 484. Please have your fax number available.■

■ For a complete Quad FXO I&M Practice: 877.457.5007, Document # 485. Please have your fax number available.■

## CONNECTIONS

- All connections are made through the 50-pin amphenol connector on the back panel TA 750/850/1500.

## ELECTRICAL CODE COMPLIANCE

The Quad FXS and Quad FXO are to be installed in restricted access locations and in equipment with a Type “B” or “E” installation code.

Code	Input	Output
IC	A	–
TC	–	X
PC	C	C

## APPLICATIONS

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by ADTRAN could void the user’s authority to operate this equipment.

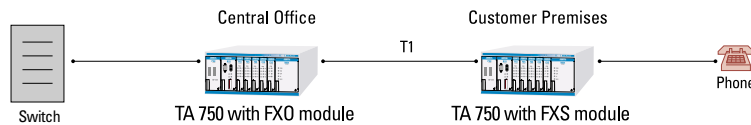


Figure 1. Standard FXO/FXS application



Figure 2. Application using FXS in TR-08 mode

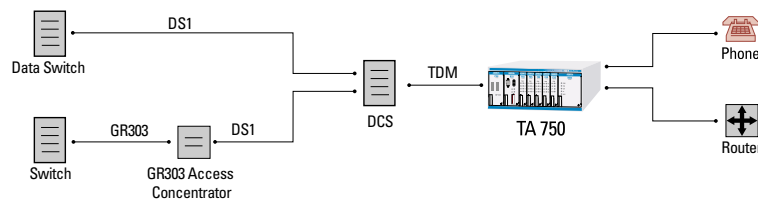


Figure 3. Application using FXS to GR303 Access Concentrator

## MODES OF OPERATION

*Note: Signaling states are provisioned through the BCU.*

### FXS

- FXS Loop Start (default)
- FXS Ground Start
- TR-08 Single Party
- TR-08 Universal Voice Grade
- DPO
- Tandem (E & M)

### FXO

- FXO Loop Start (default)
- FXO Ground Start
- DPT

## ATTENUATION LEVELS

### 0 dB to -9 dB

#### FXS

- Short loop default: -6 dB Transmit, -3 dB Receive
- Long loop default: -3 dB Transmit, -3 dB Receive

#### FXO

- Default 0 dB Transmit, 0 dB Receive

## IMPEDANCE SETTINGS

### FXS

- 600 Ω
- 900 Ω
- 600 Ω + 2.16 μF (short loop default)
- 900 Ω + 2.16 μF (long loop default)

### FXO

- 900 Ω + 2.16 μF

## WARRANTY

Warranty for Carrier Networks products manufactured by ADTRAN and supplied under Buyer’s order for use in the U.S. is ten (10) years. For a complete copy of ADTRAN’s U.S. Carrier Networks Equipment Warranty: (877) 457-5007, Document 414.